

### STANDARDS

ANSI/TIA-568-C.2  
IEC 61156-5  
EN 50288-10-1  
EN 50173  
ISO/IEC 11801  
EN 50575  
EN 50399  
EN 13501-6

### APPLICATIONS

10BASE-T (IEEE 802.3)  
4/16 Mbps TOKEN RING (IEEE 802.5)  
100BASE-VG-AnyLAN  
100 Mbps TP-PMD (ANSI X3T9.5)  
100BASE-T (IEEE 802.3)  
55/155 Mbps ATM  
1000BASE-T (Gigabit Ethernet)  
1.2 / 2.4 Gbps ATM  
10G BASE-T

### REACTION TO FIRE

Class: D<sub>ca</sub>-s2,d2,a1  
(according to EN 13501-6)

### COLOUR CODES

Pairs	Colours Combinations
1	White / Blue
2	White / Orange
3	White / Green
4	White / Brown

Outer sheath colour: White [BL]

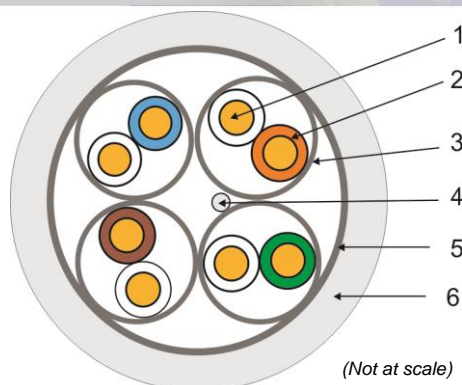
### PART NUMBER / PACKAGING

589D041BLP /Reels 500m  
589D042BLP /Reels 1000m

### OTHER CHARACTERISTICS

Storage Temperature -20°C to 70°C  
Operating Temperature -20°C to 70°C

Laying Temperature -5°C to +50°C  
(recommendation: between -5°C and +5°C,  
prior storage 24h at 20°C)



### CONSTRUCTION

- 1 – Conductor: 23 AWG, Solid Bare Annealed Copper.
- 2 – Insulation: Polyolefin Foam-Skin.
- 3 – Varying short pair lay-length (4 pairs).  
Individual Aluminium/polyester shielding.
- 4 – Tinned copper drain wire.
- 5 – Overall Aluminium/polyester shielding.
- 6 – Sheath: LSZH material.

### ELECTRICAL AND DIMENSIONAL CHARACTERISTICS

Max. dc Resistance (Ω/km) @20°C:	95.0
Nom. Mutual Capacity (nF/km)@1kHz:	56
NVP (% of light speed):	70
Mean input Impedance (Ω):	100 ± 5 @ 100MHz
Propagation delay (ns@10MHz):	max. 518
Delay Skew (ns/100m):	max. 40
Coupling Att dB (min.):	@30-100MHz 75 @100-1000MHz 75-20log(f/100)
Max. pulling tension (N):	80

	Approx. outer diameter (mm)	Approx. weight (kg/km)	Min. bending radius (mm)
Euroclass D <sub>ca</sub>	7.7	57.2	31

### TRANSMISSION CHARACTERISTICS

Freq MHz	ATTN dB/100m (max.)	NEXT dB (min.)	PS-NEXT dB (min.)	ELFEXT (ACR-F)		PS-ELFEXT dB/100m (min.)	ACR dB/100m (min.)	PS-ACR dB/100m (min.)	RL dB/100m (min.)
				dB/100m (min.)	dB/100m (min.)				
1*	2.1	75.3	72.3	68.0	65.0	73.2	70.2	20.0	
4	3.8	66.3	63.3	56.0	53.0	62.5	59.5	23.0	
8	5.3	61.8	58.8	69.9	46.9	56.4	53.4	24.5	
10	5.9	60.3	57.3	48.0	45.0	54.4	51.4	25.0	
16	7.5	57.2	54.2	43.9	40.9	49.8	46.8	25.0	
25	9.4	54.3	51.3	40.0	37.0	45.0	42.0	24.3	
31.25	10.5	52.9	49.9	38.1	35.1	42.4	39.4	23.6	
62.5	15.0	48.4	45.4	32.1	29.1	33.4	30.4	21.5	
100	19.0	45.3	42.3	28.0	25.0	26.2	23.2	20.1	
155	24.1	42.4	39.4	24.2	21.2	18.4	15.4	18.8	
200	27.6	40.8	37.8	22.0	19.0	13.2	10.2	18.0	
250	31.1	39.3	36.3	20.0	17.0	8.3	5.3	17.3	
300	34.3	38.1	35.1	18.5	15.5	3.9	0.9	17.3	
350	37.2	37.1	34.1	17.1	14.1	---	---	17.3	
400	40.1	36.3	33.3	16.0	---	---	---	17.3	
500	45.3	34.8	31.8	14.0	---	---	---	17.3	

\* For information only.

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Note: DATA cables are not suitable for low impedance applications as: heating, lighting, etc...

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